CLAIMS

1. Optical filtering/electromagnetic screening structure (1) for being joined to at least one transparent substrate (20), especially made of glass, the structure comprising at least two plastic sheets (10, 12) and including, or intended to be joined to the sheets (10, 12), a conducting electromagnetic screening element (11), characterized in that at least one sheet (10) is made of a thermoplastic, the other sheet (12) constitutes a sheet for covering the conducting element (11) or the thermoplastic sheet (10), and either one or both of the two sheets incorporate at least one mineral pigment or at least one organic dye so as to produce, in respect of the structure (1), an orange filter for light of wavelength centred on 590 nm.

2. Structure according to Claim 1, characterized in that at least one of the sheets, namely the thermoplastic sheet (10) and/or the covering sheet (12), incorporates at least one mineral pigment or at least one organic dye in order to form an infrared filter in the 800 to 1250 nm wavelength range.

3. Electromagnetic screening structure according to Claim 2, characterized in that one of the two sheets (10, 12) is neutral while the other sheet includes at least two pigments or dyes that provide, through the structure, the orange filter and the infrared filter, respectively.

4. Electromagnetic screening structure according to Claim 2, characterized in that the thermoplastic sheet (10) includes a pigment or a dye that provides, through the structure, the orange filter or the infrared filter and the covering sheet (12) includes a pigment or dye that provides the orange filter or the infrared filter that the other, thermoplastic, sheet (10) does not provide.

5. Structure according to any one of the preceding claims, characterized in that the conducting element (11) is formed from a metal wire gauze joined between the two sheets (10, 12).

6. Structure according to any one of Claims 1 to 4, characterized in that the conducting element (11) is formed from a metal wire mesh deposited on a support sheet whose composition is based on one of the following materials: polycarbonate, polymethyl (meth)acrylate, polyethylene terephthalate, polyethersulphone, polyetherketone and acrylonitrile-styrene copolymer.

7. Structure according to Claim 6, characterized in that the support sheet for the conducting element constitutes the covering sheet (12), the conducting element (11) being placed between the thermoplastic first sheet (10) and the covering sheet (12).

8. Structure according to Claim 6 or 7, characterized in that the covering sheet (12) bearing the conducting element (11) is coated on the opposite side from the conducting element with a protective film (14) made of polyethylene terephthalate (PET), or of polyvinyl chloride (PVC) or of polypropylene or of high-density polyethylene, with a thickness of less than or equal to 60 µm.

9. Structure according to any one of Claims 1 to 4, characterized in that the conducting element (11) is formed from a metal layer, such as one based on silver, deposited on a support sheet that is formed by the covering sheet (12), the said element being placed between the covering sheet and the thermoplastic first sheet (10).

10. Structure according to Claim 6 or 9, characterized in that the support sheet for the conducting element is formed from a complementary plastic sheet (13) that is laminated between the thermoplastic first sheet (10) and the covering sheet (12).

11. Structure according to any one of the preceding claims, characterized in that the thermoplastic first sheet (10) and the covering sheet (12) when it does not constitute a support sheet for the conducting element are made of polyvinyl butyral, or of polyurethane, or of ethylene-vinyl acetate.

12. Structure according to any one of the preceding claims, characterized in that it is joined to a single transparent substrate (20), the thermoplastic first sheet (10) being joined to the substrate.

13. Structure according to any one of Claims 1 to 11, characterized in that it is laminated between two transparent substrates (20, 21), the thermoplastic sheet (10) and the covering sheet (12) being joined to each of the substrates (20, 21), respectively.

14. Structure according to Claim 12 or 13, joined to at least one transparent substrate (20), characterized in that the transparent substrate (20) has, on its face that faces the thermoplastic sheet, a metal layer such as one based on silver in order to form the conducting element (11) when the latter is joined to the structure.

15. Structure according to Claim 12 or 13, characterized in that it provides, in respect of the structure/substrate(s) assembly, an infrared filter with a corresponding light transmission T_{IR} not exceeding 22%, and an orange filter with a corresponding light transmission T_{NE} of between 20% and 40%, the structure/substrate(s) assembly having a light transmission coefficient in the visible of between 40% and 60%, with a less than 3% purity.

16. Electromagnetic screening structure according to Claim 15, characterized in that the infrared filter ensures transmission at 815 nm of at most 22%, transmission at 870 nm of at most 18% and transmission between 900 and 1250 nm of at most 12%.

17. Display screen, especially a plasma screen, having on the front face (2) a structure (1) according to any one of Claims 12 to 16.

18. Screen according to Claim 17, characterized in that at least one glass substrate (20, 21) is made of toughened glass.

19. Screen according to Claim 17 or 18, characterized in that at least one of the glass substrates (20, 21) has an antireflection coating on the opposite face from the structure.

20. Screen according to one of Claims 17 to 19, characterized in that the covering sheet (12) has an antireflection coating on the opposite face from the thermoplastic first sheet (10).

21. Screen according to one of Claims 17 to 20, characterized in that the structure (1) is adhesively bonded directly to the front face of the screen.